

## **Dr. Munkhbayar Baasandorj**

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### **Education**

Ph.D., Environmental Science, School of Public and Environmental Affairs, Indiana University, 2003 - 2008  
MS, Environmental Science, Indiana University, Bloomington, IN, 2001 - 2003  
B.S. Physics, Dokuz Eylul University, Izmir, Turkey, 1996 - 2000

### **Professional Experience**

2008 - present **Research Scientist**, Chemical Sciences Division, Earth System Research Laboratory, National Oceanic and Atmospheric Administration (NOAA)  
2002 - 2008 Research Associate, School of Public and Environmental Affairs, Indiana University

### **Scholarships and Awards**

Mongolian Professional Fellowship, awarded by Open Society Institute, NY, 2001 – 2003  
Mongolian government scholarship for undergraduate degree, 1995 – 2000  
Turkish Prime Minister's fellowship, 1996 – 2000

### **Publications**

**Baasandorj, M.**; Feierabend, K.J.; Burkholder, J.B., “Rate coefficients and ClO Radical Yields in the Reaction of O(<sup>1</sup>D) with CClF<sub>2</sub>CCl<sub>2</sub>F, CCl<sub>3</sub>CF<sub>3</sub>, CClF<sub>2</sub>CClF<sub>2</sub>, and CCl<sub>2</sub>FCF<sub>3</sub>” manuscript submitted to *International Journal of Chemical Kinetics*

**Baasandorj, M.**; Papanastasiou, D.K.; Talukdar, R.K.; Hasson, A.S.; Burkholder, J.B., “(CH<sub>3</sub>)<sub>3</sub>COOH (t-Butyl Hydroperoxide): OH Reaction Rate Coefficients between 206 and 375 K and the OH Photolysis Quantum Yield at 248 nm. “ *Physical Chemistry Chemical Physics*, **12**, 12101-12111, 2010

**Baasandorj, M.**; Knight, G.; Papadimitriou, V.C.; Talukdar, R.K.; Ravishankara, A.R.; Burkholder, J.B., “Rate Coefficients for the Gas-Phase Reaction of the Hydroxyl Radical with CH<sub>2</sub> = CHF and CH<sub>2</sub> = CF<sub>2</sub>”, *Journal of Physical Chemistry, A*, **114** (13), 4619-4633, 2010

Roberts, J.M.; Veres, P.; Warneke, C.; Neuman, J.A.; Washenfelder, R.A.; Brown, S.S.; **Baasandorj, M.**; Burkholder, J.B.; Burling, I.R.; Johnson, T.J.; Yokelson, R.J. and Gouw, J. de, "Measurement of HONO, HNCO, and Other Inorganic Acids by Negative-ion Proton-Transfer Chemical-Ionization Mass Spectrometry (NI-PT-CIMS): Application to Biomass Burning Emissions." *Atmospheric Measurement Techniques*, **3**, 981-990, 2010

**Baasandorj, M.**; Griffith S.; Dusanter S.; and Stevens, P.S., "Experimental and Theoretical Studies of the Kinetics of the OH plus Hydroxyacetone Reaction As a Function of Temperature", *Journal of Physical Chemistry, A*, **113** (39), 10495-10502, 2009

**Baasandorj, M.** and Stevens, P.S., "Experimental and theoretical studies of the kinetics of the reactions of OH and OD with 2-methyl-3-buten-2-ol between 300 and 415 K at low pressure", *Journal of Physical Chemistry, A*, **111** (4), 640 -649, 2007

Lee, W.; **Baasandorj, M.**; Stevens, P.S.; and Hites, R.A., "Monitoring OH-Initiated Oxidation Kinetics of Isoprene and Its Products Using Online Mass Spectrometry", *Environmental Science Technology*, **39** (4), 1030 -1036, 2005

### **Selected Presentations**

"(CH<sub>3</sub>)<sub>3</sub>COOH (t-Butyl Hydroperoxide): OH Reaction Rate Coefficients between 215 and 375 K and the OH Photolysis Quantum Yield at 248 nm" 21<sup>st</sup> International Symposium on Gas Kinetics, Leuven, Belgium July 2010

"Reaction of Hydroxyl Radicals with Fluorinated Ethylenes" American Geophysical Union Meeting, San Francisco, California December 2009

"Experimental and Theoretical Studies of the Kinetics of the OH-initiated Oxidation of Several Unsaturated Alcohols" American Geophysical Union Meeting, San Francisco, California December 2006

"Experimental Studies of the Kinetics of the OH-initiated Oxidation of Biogenic Compounds" American Geophysical Union Meeting, San Francisco, California December 2005

### **Professional Affiliations**

Member, American Geophysical Union 2003 – present